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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,672	02/25/2002	Katsutoshi Misuda	03500.016227	8154

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EXAMINER

FERGUSON, LAWRENCE D

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 12/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/080,672

Applicant(s)

MISUDA, KATSUTOSHI

Examiner

Lawrence D Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4/5. 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Election***

1. This action is in response to the provisional election mailed October 15, 2003. (Group I) Claims 1-12 were provisionally elected rendering (Group II) Claim 13 withdrawn as a non-elected species.

***RESPONSE TO REQUEST FOR RECONSIDERATION***

2. Applicant's election with traverse of method of making recording medium (Group II) is acknowledged. Applicant traverses on the grounds that all of the claims could be searched by one Examiner without undue effort and it is not mandatory to make a restriction requirement in every possible situation. The search of the 2 classes and subclasses would entail the requisite serious burden, as the search for method of making is not the same as the article search. Additionally, the steps used in the method claims would not be expected to appear in the class/subclass of the product claims. Every recording medium is not made using the same method steps.

The requirement is deemed proper and is therefore made **FINAL**.

***Claim Rejections – 35 USC § 103(a)***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 8-9 and 11-12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al. (U.S. 6,203,899).

Hirose discloses an ink jet recording medium comprising a base material, ink receiving layer provided on the base material and a surface layer (dye fixing layer) provided on the ink receiving layer (column 2, lines 40-60) where the particles making up the surface layer fixes the coloring material component to the surface layer (column 3, lines 40-45 and column 4, lines 60-65). The ink receiving layer is equivalent to the claimed light reflecting layer because it contains light reflecting material, such as aluminum. The reference discloses the ink receiving layer includes pigments such as silica and alumina which are used singly or in combination, where it is preferable to use at least one selected from silica and alumina (column 5, lines 50-67). The surface layer of Hirose includes alumina hydrate (column 3, line 52 through column 4, line 12) where the particles are within a range of from 0 to 100 parts by weight (column 5, lines 34-40) and the surface layer has a glossiness of 20% or higher (column 5, lines 45-49). Hirose does not disclose the claimed content of particles having an average pigment particle size as in instant claims 1-3 and 11. The experimental modification of this prior art in order to achieve optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller* 105 USPQ 233. One of ordinary skill in the art would have been motivated to adjust the content of particles

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having an average pigment particle size in order to optimize the ink absorbing properties of the recording material. (See *In re Boesch and Slaney*, 205 USPQ 215). Instant claim 12 is directed to how an image is made using recording of the recording medium. The *process* by which an image or recording medium are prepared is not dispositive of the issue of patentability of the instant *article* claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966

***Claim Rejections – 35 USC § 103(a)***

5. Claims 1, 4-7 and 10, are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1048480 A1 (EP '480).

EP '480 discloses an ink jet recording material comprising a carrier that has an underlayer and overlayer (dye-fixing layer), where the underlayer comprises barium sulfate and alumina or silicic material (abstract). The light reflecting layer is equivalent to the underlayer because the underlayer comprises light reflecting material, such as aluminum. EP '480 discloses the material is glossy. EP '480 does not disclose the claimed content of particles having an average pigment particle size as in instant claims

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1 and 10. The experimental modification of this prior art in order to achieve optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller* 105 USPQ 233. One of ordinary skill in the art would have been motivated to adjust the content of particles having an average pigment particle size in order to optimize the ink absorbing properties of the recording material. (See *In re Boesch and Slaney*, 205 USPQ 215). With respect to the claimed glossiness and refractive index of the recording medium, as in instant claims 6 and 9, these features are directly related to the specific pigmented particles used. Since the reference uses the same barium sulfate in the underlayer and the same dye-fixing layer, respectively, the glossiness and refractive index of the recording material would be expected to be the same as Applicant claims.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ichioka et al. (U.S. 6,177,188) discloses a recording medium comprising a base and in ink receiving layer provided on the base, where the ink receiving layer comprises pigment (abstract).

### **Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the

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examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson  
Examiner  
Art Unit 1774

CYNTHIA M. KELLY  
SUPERVISOR  
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